1/2 1/19

STATE OF CALIFORNIA

CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD

ase Year Modification Request Certification

Part 2: Generation Study - Includes Extrapolation of Residential or Non-Residential Diversion Data

To request a substitution for a previously approved base year used in calculating the diversion rate for your jurisdiction, please complete and sign this form and return it to your Office of Local Assistance (OLA) representative at the address below, along with any additional information requested by OLA staff. When all documentation has been received, your OLA representative will work with you to prepare for your appearance before the Board. If you have any questions about this process, please call (916) 341-6199 to reach your OLA representative.

Mail completed documents to:

California Integrated Waste Management Board Office of Local Assistance (MS - 25) 1001 I Street PO Box 4025 (mailing address) Sacramento, CA 95812-4025

General instructions:

Please select the ONE choice below that best explains your request to the Board.

- 1. Use a recent generation-based study to calculate our current reporting year generation amount, but not officially change our existing Board-approved base year.
- 2. Use a recent generation-based study to officially change our existing Board-approved base year to a new base year.

The shaded cells on these sheets are protected. If you have problems using these sheets, please contact your Office of Local Assistance representative by calling (916) 341-6199

Section (; durisdiction information and a Ali respondents musi complete this socilian	ertification					
I certify under penalty of perjury that the inform and that I am authorized to make this certificati	ation in this d ion on behalf (ocume of:	nt is to	ue and corre	ct to the b	est of my knowledge,
Jurisdiction Name	· · · · · · · · · · · · · · · · · · ·	County	,			
City of South Pasadena		Los /	\naeie:	s County		
Authorized Signature 160 m c. Flander		Title			rks Assistan	t
Type/Print-Name of Person Signing		Date	1/31	92-	Phone () Include Area Code
Diana Harder					(626) 403	J-7243
Person Completing This Sheat (please print or type)		Title		Aurora Ass	sociates	
Alyson Burleigh	**					•
Affiliation: Consultant		<u>. </u>			· · · · · · · · · · · · · · · · · · ·	
Mailing Address				State		ZIP Code
1198 E. Harrison Avenue	Salt Lake City			UT		84105
E-Mail Address auroraone@utah-inter.net	J			<u> </u>	- -	

Section II: Information for New Generation-Base	d Study					
Attach additional sheets if necessary—reference	e each response to the appropriate cell number (e.g.,					
Note: New base years must be representative of a j	urisdiction's disposal and diversion.					
Current Board-approved existing base year:	2. Proposed new generation-based study year:					
1990	2000					
3. Explain how the proposed generation study year is representative of average annual jurisdiction disposal and diversion:						
During the new base year, 2000, no unusal disposa	l or diversion activities occurred in the City.					

4. Enter diversion rate information below	w.				
Diversion rate calculated using existing base year	a.	7	%	Diversion rate calculated using new generation-based study	b. 44 %
For existing base year pounds/person/day based on generation		8		For new generation based study pounds/person/day based on generation	10
Residential Non-Residential generation 78 % generation		22	%	Residential Non-Res generation 25 % generati	
Population existing generation-based study		239	36	Population new generation-based study	26000

5. If there is an increase from 4a to 4b, please explain how the new diversion rate is consistent with your current diversion implementation efforts. If the proposed new generation tonnage results in an increase in your pounds/person/day, please explain how this is consistent with your current diversion implementation efforts and provide examples (e.g., change in jurisdiction's demographics).

The original base year waste generation study (1990) omitted significant tonnages associated with both disposal and diversion activities. With the new base year waste generation study prepared for 2000, the City has attempted to correct the omissions from the original study. Since the original base year, the City, its franchised waste hauler, residents and businesses have implemented a curbside green waste program; implemented a commercial waste MRFing program; grasscycling, backyard and on-site composting/mulching programs; City tree contractor diversion programs; commercial on-site green and wood waste diversion programs; new commercial source reduction and recycling activities; white good collection (dumpster day); and, public education/outreach programs. Additionally, landfill salvage and alternative daily cover activities also divert waste 6. If the difference between the proposed diversion rates in 4a and 4b is greater than 5 percentage points, please explain the specific reasons for the difference. (For example: new/improved curbside diversion

In addition to the explanation provided in item #5 above, since the original base year, the City, its franchised waste hauler, residents and businesses have implemented a curbside green waste program; implemented a commercial waste MRFing program; grasscycling, backyard and on-site composting/mulching programs; City tree contractor diversion programs; commercial on-site green and wood waste diversion programs; new commercial source reduction and recycling activities; white good collection (dumpster day); and, public education/outreach programs. Additionally, landfill salvage and alternative daily cover activities also divert waste from disposal. These programs are in addition to programs that existed prior to 1990 such as the residential curbside recycling program.

7. Disposal Tonnage (enter values):	8252	19029	27281		
	Residential	Non-Residential	Total		
Please select the ONE choice below that best explains your disposal data and complete the required tables.	posal data and complete the	required tables.			
a. All tons claimed are from the Board's Disposal Reporting System (No explanation required. Go to Section 8.)	ling System (No explanation re	equired. Go to Section 8.)			
E. All tons claimed are from a 100 percent audit of hauler and self-haul tonnage. (Please complete Reporting Year Tonnage Modification Request and	ir and self-haul tonnage. (Plea	ase complete Reporting Year T	onnage Modification Request and		
Certification sheet found at www.ciwmb.ca.gov/LGCentral/Forms/rytnmdrq.doc)	s/rytnmdrq.doc)				
c. Some Disposal Reporting System data were corrected. (Please complete Reporting Year Tonnage Modification Request and Certification sheet found at www.ciwmb.ca.gov/LG	d. (Please complete Reporting	y Year Tonnage Modification Re	equest and Certification sheet found	at www.ciwmb.ca.gov/LG	
Central/Forms/rytnmdrg.doc)					

8. In the table below, list the summarized diversion activities and diversion data records that support your claim and are available for Board audit. (Note: the Board expects the jurisdictions to be able to provide all backup documentation, if requested.) Include type of record and location—for example, weight tickets from transfer stations. This section should capture all diversion tonnage (sheet will perform all addition calculations). If any diversion is from restricted wastes (i.e., agricultural wastes, inert solids [e.g. concrete, asphalt, dirt, etc.], white goods, and scrap metal), please identify those programs/waste types and fill out section 11. Note: Restricted waste material should not be extrapolated in non-residential waste audits. Please mark as attachment 8 all copies of survey sheets.

* Please provide detailed non-residential waste audit information in Section 9.

Diversion Activity	Actual Tons	Estimated or Extrapolated Tons	Total Tons	Relative Percent to Total Generation	Diversion Activity Actual Tons Estimated or Total Tons Relative Percent Specific Material Type(s) Specific Conversion Factor Used (if Type of Record and Location of Record to Total Tons Generation Green Tons Generation Tons Tons Tons Tons Tons Tons Tons To	Specific Conversion Factor Used (if any) and Source	Type of Record and Location of Record
Pease use the Board's program types. The program type glossary is online at: www.ciwmb.ca.gov/LGCentral/P ARIS/Codes/Reduce.htm	€	©	(A+B)	(A+B)/Total Generation	(List programs with multiple materials together)		
Residential Source Reduction							
Backvard Composting							
Grasscycling					4 11 .		
Other Residential Source Reduction (list each program separate	uction (list eac	ch program seg	sarately)		Sleen		2000年の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の
Enter program name				2.00			
Enter program name				2.0			
Enter program name							
Enter program name			200				
Enter program name							
Subtotal, Res. Source Reduction	0	0	0				
Residential Recycling Activities							
Curbside Recycling	F. C. C.		OC. 100E	2	Aluminum cans, tins cans, glass containers, plastic containers (#1 & #2), and	Curco	Athens Services' annual summary prepared for the
	121	ĽŽ.	151.23		Idwahahaia	SIGI	California Denartment of Conservation Database
	298	Ϋ́	298 28	0.6%	Aluminum cans, glass bottles, and plastic containers	попе	California Department of Conservation, Sacramento, California
Drop-off Centers	0	ΑN					
Other Residential Recycling (list each program separately)	lst each progr.	am separately)					
Enter program name		N/K					
Enter program name		N/A					
Enter program name		N/A	\$ · \$				
Enter program name		N/A		A STATE OF THE STA			

NA

Enter program name

Subtotal, Residential			!				
Recycling	1026		1025.57	2.1%			
Residential Composting Activities	38						
Green Waste Drop-off		W.V.	And the second of the second o				17 31
Curbside Green Waste	2693	ΑN	2693.09	5.5%	Yard Waste	none	Athens Services' annual summary prepared for the City for 2000, City/Consultant's files
Christmas Tree Program			准				2000-2001 Christmas Tree Recycling Program summary letter dated February 28, 2001, County Sanitation Districts of Los Angeles, City/Consultant's
	74	NA	73.71	0.2%	Yard Waste	100 lbs./tree	IIIes
Other Residential Composting (list each program separately)	(Ilst each pro	gram separate	<u>(</u>				
Enter program name		A/N					
Enter program name		N/A		- that walking.			
Enter program name		A/N					
Subtotal, Residential	2787	#0	2766.8	288		1、1の1の1の1の1の1の1の1の1の1の1の1の1の1の1の1の1の1の1	
Subtotal, Residential	2 20		2000	3.3			
My William Control Con	3/82	9	3/92.3/	C.C.			・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・
Non-Kesidennal Source Reduction Activities	5 (1) 5		: Āi				
Non-Residential Waste Audits**	8983	1874	2837.2	5.8%	See Section 9	See Section 9	8 Johns es
Other Non-Residential Source	Redistrion (like	Feach prodrar	n senaratelyt		The second secon		
Grasscycling						8 tons/acre/year, CIWMB	Parks Department estimate of 8 acres of athletic
	64	N/A	64	0.1%	Yard Waste	reports	fields and other grass areas that are grasscycled.
Backyard & On-Site Composting/Mulching			7,71.5			Wood Chips, Shredded - 500 lbs./cu.yd., Conducting a	
,						Diversion StudyA Guide for California Jurisdictions. April	
	20	N.	£	% 0	Yard Waste	2001, Appendix J Conversion Factor Sources	Parks Department estimate of number of cu.yds. Of material that is mulched and used on City trails.
Enter program name	22	NA.		Ç			1,000
Enter program name		N/A					
Enter program name		N/A			**************************************	Trust 1.27	17711710000000000000000000000000000000
Subtotal, Non-Residential Source Reduction	1147	1874.01	3021.2	6.2%			
Non-Residential Recycling					· · · · · · · · · · · · · · · · · · ·		
	c	4400	470E 44	000			Santim 9
	,	3		P 2			1000年間では、1000年には、1
Other Non-Residential Recycling (list each program separate)	ng (list each p	rogram separa	rtely)				
Commercial Self-Haul Greenwaste	3/8	Š	378.09	0.8%	Yard Waste	попе	City tree maintenance contractor, West Coast Arbonists reports to the City, City/Consultant's files
MRF	2754	VIN 1	27.K3 (K0)	100	Office Paper, Mixed Paper, Newspaper, Corrugated Cardboard, Glass Containers, Ferrous Metals, Aluminum Cans, Plastics, Yard Waste and	eucu	Athens Services' annual summary prepared for the City for 2000. City/Consultant's files
Enter program name	77.7	N/A		200			
Enter program name		N/A					

Meeting	18-19, 2003
Board Mo	March 18

Enter program name		N/A		3 P			
Subtotal Non-Residential				i gest	700 (100 m) (1		
Recycling	3135	4782.59	7817.19	16.2%	17世紀のはは、大田町の日本で、	では、配料機・関連できる。 これでは、 一般の 無関制・関係の主義というがない。 こうかん	
Non-Residential Composting Activities	tivities					A. D. Daniel Berling State of	
Non-Residential Waste Audits*	4095	169	4284.14	8 7%	See Section 9	8-UCII)	See Section 9
Other Non-Residential Composting (list each program separately)	sting (list eac	h program se	parately)				
Enter program name		A/N					
Enter program name		A/N	1888 - 18				-
Enter program name		A/A					
Enter program name		A/A					
Enter program name		A/A					
Subfotal Non-Residential	4095	168.88	4264.14		・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・		
Subtotal Non-Residential		SE ACOR	4 KOOD E3	En C			
Residential/Non-Residential Diversion	Nersion	04000	CC:20701	****			
Activities				To the second se			
ADC							Los Angeles County Quarierly Disposal Reports (less Residential Curbside Yard Waste and Christmas Tree program amounts) and Orange
	2061	A/A	2061.35	4.2%	Yard Waste	none	County Quarterly Green Waste Exempt reports, City/Consultant's records
Sindge		N/A				,	
Scrap Metal		N/A					
Construction and Demolition		NA NA					
Landfill salvage	672	A/N	672.48	1-4%	Inert Materials	none	Los Angeles County Quarterly Disposal Reports, City/Consultant's records
Subtotal Residential/Non- Residential Diversion	2734		2733.83	%9 9	57. 57. 57.	**************************************	
Total Res/Non-Res Source Reduction Tons	1147	1874	3024	6.2%	30 July 10 Jul		
Total Diversion Tons.	14903	6825.48	21728.73	44%			
Total Disposai Tons from Sec.7	27.261		27281	55.7%			
Total Generation (Div+Dis)		6825.48	49009.73	1			XX
	を では 一番 本書 本書 ままま こうしゅう	1000年の東西の一つでは北京の東京の東京の東京の東京の東京の東京の東京の東京の東京の東京の東京の東京の東京					
2	Diversion Rate	os:	152	44%			

9. Specific Non-Residential Sector Waste Audits-Top 10 Non-Residential Generators

Please complete this table for the top 10 non-residential generators that were surveyed. List each non-residential generator separately from the largest to smallest, based on total diversion tons. The audit reference number should correspond to the number given your survey sheet.

(Table will perform all calculations).

Include an attachment, marked "Attachment 9", which includes a summary of all the generators surveyed and all extrapolation calculations used to estimate the diversion rate:

include copies of survey sheet(s) used.

Include for each generator (use type of generator in lieu of specific generator name e.g., grocery store) each specific diversion activity and material type (e.g. cardboard recycling) and the associated tonnage for each diversion activity/material type, and applicable conversion factors/source.

If using the number of employees for your extrapolation method, include this information for each generator surveyed.

Please order the non-residential generators, largest to smallest, based on total diversion tons.

generator

being used for the extrapolation calculation. For each non-residential generator, the disposal must be broken out by cubic yard, and roll-off or compactor weights. If disposal was estimated for either disposal-based or employment-based extrapolation methods, please include conversion factor(s) for disposal and the source for conversion factor(s). Please provide an explanation as to how the conversion factor(s) is (are) appropriate for your jurisdiction e.g., "Study was conducted to determine average weights using hauler weight

_	110 mg 250 110 c							
	Method Phone (P) Mall (M) On-site (O) Other	0	0		0	0	0	0
Parram of Total	Generation (Total Diversion Tons Total Generation in Section 9)		上 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)					
Total Bhoreion	1003	4095.26		966.01	835.5	778.1	623.2	545.5
Commonthin Tons		4095		0	0	37	29	26
Decueling Tone		0			835	512	410	359
Collection Badhardan	Tors	0		963	ļ	230	184	161
Brombor of	Employees	n/a		76	50	n/a	π/a	e/u
and built of the Andrew State of the Andrew State of the	Material Type (e.g. paper recycling, grasscycling). (List activities on one line)	Composts horse manure and wood shavings	Reuses OCC, plastic and food (donation)+C24; recycles beverage containers, newspapers	and toner cartridges, reduced paper and plastic use; and, grasscycles	96 Recycles OCC, paper and toner cartridges and reuses OCC	13 Recycles OCC, plastic, toner cartridges, grease and fat scraps; reuses pallets, food (donation); and, composts produce	14 Recycles OCC, plastic, toner cartridges, grease and fat scraps; reuses pallets, food (donation); and, composts produce	16 Recycles OCC, plastic, toner cartridges, grease and fat scraps; reuses pallets, food (donation); and, composts produce
- Andrew	Reference	<u>0</u>	05		ŏ	 	-	-
	odipendo odici	Stables	Church & School		Grocery Store	Grocery Store	Grocery Store	Grocery Store

					The second secon		
Grocery Store	108 Recycles OCC, toner cartridges						0
	and grease, and reuses pallets						
	and food (donation)	150	163	72	0	235.15	
Retail Store/Distribution	109 Reuses food (donation)	15	206	0	0	206	0
Retall Store	3 Recycles OCC	n/a	0	125	0		0
Retail Store	71 Recycles OCC and reuses patlets						0
		45	16	91	0	1066	CIRS
	The state of the s	dr.	4023	2076	4186		0

Summarize the non-residential diversion activities for the top 10 generators quantification methodology and applicable conversion factors and sources (e.g., cardboard recycling: quantified by monthly tonnage receipts provided by the contact person at the business).

Please see attached description.

10. On a separate sheet of paper, "marked Attachment 10," provide the following information for each diversion program listed in Section 8 that was extrapolated from representative sampling. **Note**: Do not include non-respondents in extrapolation because there is no data from the non-respondents. Extrapolate from survey respondents.

A. Describe sampling method, including:

- Type of sampling method (for either stratified or cluster sampling, provide detailed information on how strata and clusters were collected)
- Total number of samples included in the survey
- Number of non-respondents and respondents
- Total population
- Source for identifying population (e.g., city business licenses, commercial database, resident's addresses, etc)
- Relation of sample size to total population
- Survey data collection tool(s) and approaches
- Confidence level and margin of error for the sampled population
- Unusual outliers and exceptional anomalies describe in detail.

Note: Outliers (specific generators which fall significantly above or below others) should be removed from base amount prior to extrapolation)

B. Describe the methods used to prevent double-counting between the surveys and the reported tonnages from haulers, recyclers, materials recycling facilities and composters.

C. Describe extrapolation method, including:

- Basis of extrapolation
- Why this extrapolation method is appropriate
- Sources of information used for extrapolation, such as disposal or employment
- Include all calculations

- 11. For each restricted waste type (i.e., agricultural waste, inert solids [e.g., concrete, asphalt, dirt etc.] scrap metals, and white goods (PRC section 41781.2]) and associated program, please provide the following information:
- a. If the diversion program started on or after January 1, 1990, complete the following table.

Note: program name refers to one specific diversion program for that waste type (e.g., "diversion conducted by city public waste department.)

Restricted Waste Ty	pe	Specific Program Name	Year Started	Tonnage
Scrap Metal	•	Franchsied Waste Hauler - MRF	1997	405
Inert Solids	▼	Franchsied Waste Hauler - MRF	1997	83
Inert Solids	•	Recycled at Permitted Landfills	<1995	672
Pull Down for Waste Types	▼			·
Pull Down for Waste Types	•			
Pull Down for Waste Types	•			

- **b.** If the diversion program started before January 1, 1990 and if documentation on the program and waste type has not been approved by the Board on a separate sheet marked "Attachment 11b," give the program and waste type, and provide documentation that indicates:
- How the diversion was the result of a local action taken by the jurisdiction, which specifically resulted in the diversion (PRC sec. 41781.2 [c] [1]).
- That the amount of that waste type diverted from the jurisdiction in 1990 was less than or equal to the amount of that waste type disposed at a permitted disposal facility by the jurisdiction in any year before 1990. **Note**: this criterion is applicable to the entire jurisdiction, not to individual programs (PRC sec. 41781.2 [c] [2]). Please include documentation.
- The jurisdiction is implementing, and will continue to implement, the diversion programs in its Source Reduction and Recycling Element.

Note: If documentation for a waste type and program has already been approved by the Board, you do not have	to
provide an attachment 11b for that waste type and program. Instead, please provide date of Board approval of previous submitted information.)	(Date)
If documentation is not available, go to 11d.	

c. If the diversion program started before January 1, 1990, and the documentation requested in 11b is available (but not yet approved by the Board), complete the table below for each program claimed:

Restricted Waste Ty	pe	Specific Program Name	New Base Year or Reporting Year Diversion Tonnage
Pull Down for Waste Types	▼		
Pull Down for Waste Types	▼		
Pull Down for Waste Types	▼		
Pull Down for Waste Types	▼		
Pull Down for Waste Types	▼		
Pull Down for Waste Types	•		

d. If the diversion program started before January 1, 1990, and the documentation requested in 11b is not available, please complete the table below for each program claimed. **Note**: Only the difference between the new base year/reporting year and 1990 can be counted in the diversion rate calculation.

Restricted Waste Typ	Эе	Specific Program Name	New Base Year or Reporting Year Tonnage	1990 Diversion Tonnage	Difference
Pull Down for Waste Types	▼				
Pull Down for Waste Types	▼				
Pull Down for Waste Types	•				
Pull Down for Waste Types	•				
Pull Down for Waste Types	▼				
Pull Down for Waste Types					

Scrap Metal Recording	2					128.13 JU																																	2.718 U				D, 680.0																					
Wood/Sawdust Scrap Metal Becording	<u>a</u>																										,									V V 808 05																												
Composting	Œ			-																				1288.0																	-																							
Grass-	E E				Ì	<u> </u>		1	1	Ť	†	T			†	Ť			-	t			1	t					T		0.4591	t	Ì					H	1	\dagger				T					1	T			†	T				Ħ		1			t	
GresselFat																		16.043.0						0.7748																																								
P. 50	L							2 96 O	28 43 X																						0.045 EW																																	
Beverage Container Rec	Œ.					0,06							0.12 C		D 20	0.45		17.66 ,MM		0.5007				D 2877 C.	0.277 C										0.06	0.08 ,C				0.90	2					II, 200.0													o' 90'0), el.		0.0386 .C		
Plastic	Г																																						0.0425 ,C																									
Plastic	8															\prod				19349 VE						0.0385 E									T, 900.0	3, 110.0			0.4226 E	r 680	2000			0.38 E						0.0046 E	0.0012 ,T											A PART PART	0.0254 .E.V	
Plastic(LL Reduction	8													Ì																																																		
C Hanger	1									1				0.63								9							0.63							\rfloor]							10				L	0.63		467	182						L				
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Paper Us Reducto	E I		N, 8115.0				N 6	0.0262				0.0715				N 0000 0				0.0346 N										0.015 N		0.400% N	2						1000	900		0.03							N SPO	2			0.0036 N											
Office/Packing Paper Lies Toner (K. Henger Phesiscill). Paner Rause, Radurdon Cart Res Rause(D. Reduction		N. EG.O			N 2517 M					T TOO	N. 0000		0.0027 F				N, 10.0			N 600												2 2 7	L.	0.009 N				N 590								0.3 N						N, 210.0			N, 50.0	0.009 BB			N, 60.0					
Office Paper Recording	жап	2.4948 .M					10.81 M		4000	N, 525.U	2											3.12 N								N, 81.0	***************************************	18 228 FF F	0.5914 M				1.56 N					N, 51.0	2 00	N,								N, 81.0	-											
ONPMAGE	E E																																						7 160													0.455 ,L		T						0.455 .L				
Palet (A) Palet (A) Reuse Record	B																																											12																				
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#01 Stables

Horse Manure and Wood Shavings Composting 2-40 yard bins/week = 2 x 95 cu.yds. x 52 weeks x 828.5 lbs./cu.yd. / 2000 lbs. = 4095.26 TPY [assumed half horse manure (1252 lbs./cu.yd.) and half wood shavings (405 lbs./cu.yd.)

#02 Church and School

OCC Reuse 300 boxes/week = $300 \times 52 \text{ wks. } \times 1.1 \text{ lbs.}/2000 \text{ lbs.} = 8.58 \text{ TPY}$

Plastic Reuse 300 bags/week = 300 x 52 wks. x 0.77 lbs./100 bags/2000 lbs. = 0.0601 TPY

Beverage Container Recycling 7-8 lg. plastic bags/month = 7.5 x 12 x 33 gals. X 65 lbs./cu.yd. / 202 / 2000 lbs. = 0.4778 TPY*

Newspaper Recycling 17' van-full/year = 12'x5'x5'/27 x 4001bs./cu.yd. / 2000 lbs. = 2.222 TPY

Paper Reduction (school) 50% double-sided copies x 680 reams/year = $680 \times 50\% \times 5$ lbs./2000 lbs. = 0.85 TPY

Paper Reduction (church) 50% double-sided copies x 1M images/year = 1M / 500 sheets/ream x 50% x 5 lbs./2000 lbs.=2.5 TPY** **Paper Reduction** 10 reams/year = $10 \times 5 \text{ lbs.}/2000 \text{ lbs.} = 0.025 \text{ TPY**}$

Toner Cartridge Recycling 10 medium boxes worth/year = $10 \times 10 \times 2.5$ lbs./2000 lbs. = 0.125 TPY

Plastic Reduction (Changed from disposable to reusable service ware for 325 children; cafeteria open 184 days/year) = 325 x 184 x 0.0372 lbs./2000 lbs. = 1.1123 TPY

Grasscycling 12,850 sq.ft. = $12,850/43,560 \times 8 \text{ T/ac./yr.} = 2.36 \text{ TPY}$

Food Reuse (Donation, including collection from local restaurants) 600-750 grocery bags/week = 675 x 52 x 3 cu.ft. x 18

lbs./2000 lbs. = 947.7 TPY

*Previous calculation did not multiply by 12 months.

**Did not calculate and include in original figures.

#96 Grocery Store

OCC Recycling 20 bales/week (a) 3x4x4' = 20x52x3'x'4'x4'/27x900 bs. = 832 TPY

OCC Reuse 10 med, boxes/week = 10×52 wks. $\times 2.2$ lbs./2000 lbs. = 0.572 TPY

Paper Recycling 2 med. boxes of paper/week x 52 wks. x 12 reams/box x 5 lbs./2000 lbs. = 3.12 TPY

Toner Cartridge Recycling 1 cartridge/2 mos. = $1 \times 6 \times 2.5$ lbs./2000 lbs. = 0.0075 TPY

Food Reuse/Donation (did not get figures)

#13 Grocery Store

OCC Recycling 1 bale/day, 7 days/week (a) $5'x4'x4' = 1 \times 365 \times 5'x'4'x4'/27 \times 9001$ bs. 2000 lbs. = 486.7 TPY

Pallet Reuse 30/day = 30 x 360 days x 40 lbs./2000 = 216 TPY

Plastic Recycling 200 lbs./week = 200×52 wks. / 2000 lbs. = 5.2 TPY

Toner Cartridge Recycling 3 cartridges/mo. = $3 \times 12 \times 2.5$ lbs./2000 lbs. = 0.045 TPY

Food Reuse (Donation) $75 \text{ lbs./day} = 75 \times 365 \text{ days} / 2000 \text{ lbs.} = 13.69 \text{ TPY}$

Grease Recycling $55 \text{ gal./mo.} = 55 \times 12 \times 7.45 \text{ lbs.} / 2000 \text{ lbs.} = 2.46 \text{ TPY}$

Meat Fat Scrap Recycling 30 gal. Cans $3x/\text{week} = 30 \times 3 \times 52 \times 0.1337$ gal./cu.ft. $\times 57$ lbs./cu.ft. / 2000 lbs. = 17.832 TPY

Produce Composting 200 lbs./day = 200 x 365/2000 = 36.5 TPY

#14 Grocery Sto

Plastic Recycling 200 lbs./week = $200 \times 52 \text{ wks.} / 2000 \text{ lbs.} = 5.2 \text{ TPY } \times 80\% = 4.16 \text{ TPY}$ Pallet Reuse 30/day = 30 x 360 days x 40 lbs. / 2000 = 216 TPY x 80% = 172.8 TPYOCC Recycling 1 bale/day, 7 days/week @ $5^{2}x4^{2}x4^{2} = 1 \times 365 \times 5^{2}x^{2}x^{2}x^{2} = 1 \times 365 \times 5^{2}x^{2}x^{2} = 1 \times 365 \times 5^{2}x^{2}x^{2} = 1 \times 365 \times 5^{2}x^{2} = 1 \times 365 \times$

Food Reuse (Donation) 75 lbs./day = 75 x 365 days / 2000 lbs. = 13.69 TPY x 80% = 10.952 TPY Toner Cartridge Recycling 3 cartridges/mo. = $2 \times 12 \times 2.5$ lbs./2000 lbs. = 0.045 TPY $\times 80\% = 0.036$ TPY

Grease Recycling 55 gal./mo. = $55 \times 12 \times 7.45$ lbs. /2000 lbs. = 2.46 TPY $\times 80\% = 1.968$ TPY

Meat Fat Scrap Recycling 30 gal. Cans 3x/week = 30 x 3 x 52 x 0.1337 gal/cu.ft. x 57 / 2000 lbs. = 17.832 TPY x 80% = 14.2656

Produce Composting 200 lbs./day = $200 \times 365 / 2000 = 36.5 \text{ TPY } \times 80\% = 29.2 \text{ TPY}$

#15 Grocery Store

Pallet Reuse $30/\text{day} = 30 \times 360 \text{ days } \times 40 \text{ lbs.}/2000 = 216 \text{ TPY } \times 70\% = 151.2 \text{ TPY }$ OCC Recycling 1 bale/day, 7 days/week @ $5^{\circ}x4^{\circ}x4^{\circ} = 1 \times 365 \times 5^{\circ}x^{\circ}4^{\circ}x4^{\circ}/27 \times 900$ lbs. $= 486.7 \text{ TPY } \times 70\% = 340.69 \text{ TPY }$

Plastic Recycling 200 lbs./week = $200 \times 52 \text{ wks.} / 2000 \text{ lbs.} = 5.2 \text{ TPY } \times 70\% = 3.64 \text{ TPY}$

Toner Cartridge Recycling 3 cartridges/mo. = $2 \times 12 \times 2.5 \text{ lbs.}/2000 \text{ lbs.} = 0.045 \text{ TPY } \times 70\% = 0.0315 \text{ TPY } \times$

Food Reuse (Donation) 75 lbs/day = 75 x 365 days / 2000 lbs. = 13.69 TPY x 70% = 9.58 TPY

Grease Recycling 55 gal/mo. = $55 \times 12 \times 7.45$ lbs. /2000 lbs. = 2.46 TPY $\times 70\% = 1.722$ TPY

Meat Fat Scrap Recycling 30 gal. Cans $3x/\text{week} = 30 \times 3 \times 52 \times 0.1337 \text{ gal/cu.ft.} \times 57 / 2000 \text{ lbs.} = 17.832 \text{ TPY } \times 70\% = 12.4824 \text{ meat Fat Scrap Recycling}$

Produce Composting 200 lbs./day = $200 \times 365 / 2000 = 36.5 \text{ TPY } \times 70\% = 25.55 \text{ TPY}$

#108 Grocery Store

OCC Recycling 6 bales @ 400 lbs. each per week = $6 \times 400 \times 52 / 2000$ lbs. = 62.4 TPY

Pallet Reuse $25-30/\text{day} = 25 \times 312 \text{ days } \times 40 \text{ lbs.}/2000 \text{ lbs.} = 156 \text{ TPY}$

Toner Cartridge Recycling 3 cartridges/mo. = 2 x 12 x 2.5 lbs./2000 lbs. = 0.045 TPY

Grease Recycling 100 gal./2 wks. = 100 x 104 x 7.45 lbs. / 2000 lbs. = 38.74 TPY Food Reuse (Donation) 1 shopping cart/week = 1 x 52 weeks x 15 cu.ft. x 18 lbs./cu.ft. / 2000 lbs. = 7.02 TPY

#109 Retail Store

Food Reuse (Donation) 100 lg. trash bags/week = 100 x 52 weeks x 33 gals x 18 lbs./cu.ft. x 27/202 / 2000 lbs. = 206.43 TPY

#3 Retail Stores

OCC Recycling 4 bales/week @ $4^{1}x3^{1}x^{3} = 4 \times 52 \times 4^{1}x3^{1}x^{3} = 4 \times 52 \times 4^{1}x^{3} = 4 \times 52 \times$

#71 Retail Store

OCC Recycling 2 bales @ 3'x3.5'x5' per week = $2 \times 3x3.5x5/27 \times 52 \times 900$ lbs. / 2000 lbs. = 91 TPY

Pallet Reuse $15/\text{week} = 15 \times 52 \text{ weeks } \times 40 \text{ lbs.} / 2000 \text{ lbs.} = 15.6 \text{ TPY}$

	Ltens	Conversion Factor	Source
Α	Pallets	40 lbs./pallet	CIWMB, Conducting a Diversion Study - A
			Guide for California Jurisdictions, April 2001.
В	Grasscycling	8T/acre/year	Hartin, Janet, and J. Michael Henry, Reusing
			Turfgrass Clippings to Improve Turfgrass Health
		ļ	and Performance, University of California
			Cooperative Extension, ND.
C	Aluminum cans, uncrushed	65 lbs./cu.yd.	CIWMB, Conducting a Diversion Study - A
		5.61 lbs./33 gals.	Guide for California Jurisdictions, April 2001.
D	Hanger, adult	0.14 lbs. each	CIWMB, Conducting a Diversion Study - A
-			Guide for California Jurisdictions, April 2001.
E	Styrofoam Kemeis	6.27 lbs./cu.yd.	CIWMB, Conducting a Diversion Study - A
			Guide for California Jurisdictions, April 2001.
F	OldCorrugatedCardboard	1.1 lbs./box	CIWMB, Conducting a Diversion Study - A
	(OCC) Small-Sized Boxes		Guide for California Jurisdictions, April 2001.
G	OldCornigatedCardboard	2.2 lbs./box	CIWMB, Conducting a Diversion Study - A
	(OCC) Medium-Sized Boxes		Guide for California Jurisdictions, April 2001.
H	Old Corrugated Cardboard	4.0 lbs./box	CIWMB, Conducting a Diversion Study - A
	(OCC) Large-Sized Boxes		Guide for California Jurisdictions, April 2001.
I	Baled OOC	900 lbs./cu.yd.	Measuring Recycling, A Guide for State and
			Local Governments, U.S. EPA, September 1997.
<u></u>	Plastic Travs	0.3 lbs. each	Estimated weight
K	Toner Cartridges	2.5 lbs./cartridge	CIWMB, Conducting a Diversion Study - A
			Guide for California Jurisdictions. April 2001.
L,	Newspaper	35 lbs./12" stack	CIWMB, Conducting a Diversion Study - A
			Guide for California Jurisdictions, April 2001.
M	Office Paper (white, color,	0.77 lbs./gallon	CIWMB, Conducting a Diversion Study - A
	CPO, junk mail)		Guide for California Jurisdictions, April 2001.
N	White Ledger #20 Paper	1 ream=5.0 lbs.	CIWMB, Conducting a Diversion Study - A
		<u> </u>	Guide for California Jurisdictions, April 2001.
0	Fats, Solid/Liquid (cooking oil)	7.45 lbs./gailon	CIWMB, Conducting a Diversion Study - A
_		<u> </u>	Guide for California Jurisdictions, April 2001.
P	Fat	57 lbs./cu.ft.	CIWMB, Conducting a Diversion Study - A
			Guide for California Jurisdictions, April 2001.
Q	Produce Waste, mixed loose	1,443 lbs./cu.yd.	CIWMB, Conducting a Diversion Study - A
			Guide for California Jurisdictions, April 2001.
R	Bread, bulk	18 lbs./cu.ft.	CIWMB, Conducting a Diversion Study - A
_			Guide for California Jurisdictions, April 2001.
S	Paper Cup	0.014 lbs. each	CIWMB, Conversion Factors, March 1999.
T	Plastic, Grocery Bag	0.77 lbs./100 bags	CIWMB, Conducting a Diversion Study - A
			Guide for California Jurisdictions, April 2001.
U	Metal Scrap	226.5 lbs./55 gals.	CIWMB, Conducting a Diversion Study - A
			Guide for California Jurisdictions, April 2001.
V	Plastic, Bubble wrap	3 lbs./33 gals.	CIWMB, Conducting a Diversion Study - A
		<u> </u>	Guide for California Jurisdictions, April 2001.

W	Grass and Leaves	325 lbs./3 cu.yds.	CIWMB, Conducting a Diversion Study - A
			Guide for California Jurisdictions. April 2001.
X	Wood Scrap, loose	329.5 lbs./cu.yd.	CIWMB, Conducting a Diversion Study - A
			Guide for California Jurisdictions, April 2001.
Y	Sawdust, loose	375 lbs./cu.yd.	CIWMB, Conducting a Diversion Study - A
			Guide for California Jurisdictions, April 2001.
Z	OCC, uncompacted	100 lbs./cu.yd.	CIWMB, Conducting a Diversion Study - A
A 4			Guide for California Jurisdictions, April 2001.
AA	Film Plastic/Mixed, loose	22.55 lbs./cu.yd.	CIWMB, Conducting a Diversion Study - A
			Guide for California Jurisdictions, April 2001.
BB	Magazines, 8.5" x 11"	3 lbs./10 units	CIWMB, Conducting a Diversion Study - A
			Guide for California Jurisdictions, April 2001.
CC	Manure, Horse	1,252 lbs./cu.yd.	CIWMB, Conducting a Diversion Study - A
555			Guide for California Jurisdictions, April 2001.
DD	Wood, Shavings	405 lbs./cu.yd.	CIWMB, Conducting a Diversion Study - A
<u> </u>			Guide for California Jurisdictions, April 2001.
ÉE	White Ledger w/o CPO, loose	363.51 lbs./cu.yd.	CIWMB, Conducting a Diversion Study - A
FF	61 11 10		Guide for California Jurisdictions, April 2001.
rŗ	Shredded Paper	8 lbs./33 gals.	CIWMB, Conducting a Diversion Study - A
CC	7	 	Guide for California Jurisdictions, April 2001.
GG	Personal Computer	26 lbs. each	CIWMB, Conducting a Diversion Study - A
НН			Guide for California Jurisdictions, April 2001.
пn	Computer Monitor	30 lbs. each	CIWMB, Conducting a Diversion Study - A
П			Guide for California Jurisdictions, April 2001.
и	Aluminum Cans, uncrushed	1.5 ibs./full grocery	CIWMB. Conducting a Diversion Study - A
IJ	Transferred	bag	Guide for California Jurisdictions, April 2001.
,,	Used Clothing, mixed, loose	225 lbs./cu.yd.	CIWMB, Conducting a Diversion Study - A
KK	Name		Guide for California Jurisdictions, April 2001
TAIX	Newspapers, loose	400 lbs./cu.yd.	CIWMB, Conducting a Diversion Study - A
IL	Single was Faul Co.	A 04-7-1	Guide for California Jurisdictions April 2001
	Single-use Food Service	0.0372 lbs. each	Business Users' Guide for Measuring Source
ММ	Glass Containers	. 450 lbs /sss -sd	Reduction, November 1996.
	- Containers	~450 lbs./cu.yd.	CalRecovery, Inc., Conversion Factors for
NN	Soil/sandy loam, loose	2 200 lbs /sw ssl	1 Individual Material Types, December 1991.
	10080	2,392 lbs./cu,yd.	CIWMB, Conducting a Diversion Study - A
AW	Actual Weight	N/A	Guide for California Jurisdictions, April 2001. Provided by business.
		1 43/73	FTOULded by between an